

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the present application:

1. (Previously Presented) A method of ~~reducing wear in a cutting head~~boring hard rock by means of a tunnel boring machine comprising hardened steel discs which protrude from the cutting head, wherein wear in the cutting head is reduced[[,]] by adding at the cutting head [[of]] a foamed aqueous liquid composition, which comprises a foaming agent and a lubricant, the lubricant being selected from ~~the group consisting of~~ high molecular weight polyethylene oxides and bentonite.
2. (Previously Presented) The method of claim 1, in which the individual ingredients of the foaming composition are dispensed in individual aqueous form into water and are converted to foam.
3. (Previously Presented) The method of claim 1 wherein the foaming agent is at least one of anionic or nonionic surfactants.
4. (Previously Presented) The method of claim 1, in which the composition is supplied as a concentrate, which is diluted with water in situ, to provide the foaming composition.
5. – 20. Canceled.
21. (New) The method of claim 3, wherein at least one surfactant is nonionic and comprises at least one of alkanolamines, aminoxides, ethoxylated alcohols, ethoxylated alkylphenols, ethoxylated esters, glucose esters, sucrose esters or derivatives thereof.
22. (New) The method of claim 1, in which the polyethylene oxide has a weight average molecular weight of at least 1,000,000.
23. (New) The method of claim 4, in which the concentrate is added in an amount of about 0.5 to about 10 kg/m³ of rock removed.

24. (New) The method of claim 4, in which the wear-reducing foamable liquid concentrate also contains at least one of a sequestering agent or foam booster, in which the components of the wear-reducing foamable liquid concentrate are present in the following amounts:

- 0.1% to 3% polyethylene oxide;
- 2% to 40% foaming agent;
- from greater than 0% to 5% sequestering agent; and
- from greater than 0% to 10% foam booster;

by weight of liquid composition, the remainder being water.

25. (New) The method of claim 24, in which the wear-reducing foamable liquid concentrate is diluted in about 1 to about 20 volumes of water and foamed to provide a volume expansion of from about 5 to about 40 times the volume of the unfoamed material.

26. (New) The method of claim 1 wherein the foaming agent is at least one nonionic surfactant.

27. (New) The method of claim 26, in which the nonionic surfactant comprises at least one of alkanolamines, aminoxides, ethoxylated alcohols, ethoxylated alkylphenols, ethoxylated esters, glucose esters, sucrose esters or derivatives thereof.